

05-1-1999

MKB 4-21-99



## TRADEMARK OFFICE

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101033091

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark OfficeRECORDATION FORM COVER SHEET  
PATENTS ONLYTo the Honorable Commissioner of Patents and Trademarks.  
Please record the attached original documents or copy thereof.

## 1. Name of conveying party(ies):

Paul E. Young	Executed on: Jan-20-99
John M. Greene	Executed on: Jan-25-99
Ann M. Ferrie	Executed on: Jan-20-99
Steven M. Ruben	Executed on: Jan-23-99
Craig A. Rosen	Executed on: Jan-23-99
Roxanne Duan	Executed on: Mar-23-99
Jing-Shan Hu	Executed on: Jan-25-99
Kimberly Florence	Executed on: Jan-22-99
Henrik S. Olsen	Executed on: Jan-20-99
Reinhard Ebner	Executed on: Jan-20-99
Laurie A. Brewer	Executed on: Jan-27-99
Paul A. Moore	Executed on: Jan-20-99
Yanggu Shi	Executed on: Jan-20-99
David W. Lafleur	Executed on: Jan-20-99
Jian Ni	Executed on: Jan-20-99

## 2. Name and address of receiving party(ies):

Name: Human Genome Sciences, Inc.  
Street Address 9410 Key West Avenue  
City Rockville, Maryland 20850

Additional name(s) attached?

Yes ☐ No ☒

## 3. Additional name(s) of conveying party(ies) attached?

Yes ☐ No ☒

Nature of conveyance

<input checked="" type="checkbox"/> Assignment	<input type="checkbox"/> Merger
<input type="checkbox"/> Security Agreement	<input type="checkbox"/> Change of Name
<input type="checkbox"/> Other	



## 4. Title 87 Human Secreted Proteins

## 5. Application number (s) or patent numbers (s)

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No. (s)  
09/154,707 Filed: Sep-17-98B. Patent No.  
Additional numbers attached?  
Yes ☐ No ☒

## 6. Name and address of party to whom correspondence concerning documents should be mailed:

Human Genome Sciences, Inc.  
9410 Key West Avenue  
Rockville, Maryland 20850  
Telephone: 301-309-8504 Facsimile: 301-309-8439

## 7. Total of applications and patents involved

1

## 8. Total Fee (37 CFR 3.41) \$40.00

☐ Enclosed (By check in total of filing fee and Assignment Recordation Fee)  
☒ Authorized to be charged to Deposit Account

## 9. Deposit Account No. 08-3425 (Attached duplicated copy of this page if paying by deposit account)

## 10. If any additional fees due in connection with the recordation of this Assignment, please charge the same to Deposit No. 08-3425

## 11. Statement and Signature

The best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

A. Anders Brookes

Name of Person Signing  
Registration No. 36,373

Signature

Date

4/21/99

Total number of pages including cover sheet, attachment, and documents:

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Young et al.

Application Serial No.: 09/154,707

Art Unit: 1633

Filed: September 17, 1998

Examiner: Martinell, J.

For: Reticulocalbin-Like Protein  
(as amended)

Attorney Docket No.: PZ004P1

ASSOCIATE POWER OF ATTORNEY

Assistant Commissioner for Patents  
Washington, D.C. 20231


Sir:

Applicants' attorney hereby appoints all Practitioners at Customer Number 22195 as its attorneys or agents with full power of substitution, association, and revocation to prosecute the application identified above, including any continuation or divisional applications, and to transact all business in the U.S. Patent and Trademark Office connected therewith.

Applicants' attorney also request that the correspondence address remain the same.

Respectfully submitted,

Dated: October 1, 2001

  
Kenley K. Hoover (Reg. No. 40,302)  
Attorney for Applicants

Human Genome Sciences, Inc.  
9410 Key West Avenue  
Rockville, MD 20850  
Telephone: (301) 610-5771

KKH/lcc

### DECLARATION FOR PATENT APPLICATION

As a below named inventor, I declare that I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

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Priority Claimed  
Yes No

(Number) (Country) (Day/Month/Year Filed)

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PCT/US98/05311  
(Application Serial No.)

March 19, 1998  
(Filing Date)

pending  
(Status: patented, pending, abandoned)

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith A. Anders Brookes (Reg. No. 36,373), James H. Davis (Reg. No. 40,582) and Kenley K. Hoover (Reg. No. 40,302) of Human Genome Sciences, Inc. 9410 Key West Avenue, Rockville, Maryland, 20878.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

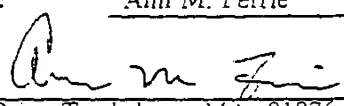
Full name of first joint inventor: Paul Young

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
 Residence: 122 Beckwith Street, Gaithersburg, MD 20878 Citizenship: US  
 Post Office Address: same as above

Full name of additional joint inventor: John M. Greene

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
 Residence: 872 Diamond Drive, Gaithersburg, MD 20989 Citizenship: US  
 Post Office Address: same as above

Full name of first joint inventor: Ann M. Ferrie

Inventor's signature:  Date: 1/25/99  
 Residence: 120 Fox Run Drive Tewksbury, MA 01876 Citizenship: US  
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Full name of additional joint inventor: Steven M. Ruben

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
 Residence: 18528 Heritage Hills Drive, Olney, MD 20832 Citizenship: US  
 Post Office Address: same as above

Full name of first joint inventor: Craig A. Rosen

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
 Residence: 22400 Rolling Hill Road, Laytonsville, MD 20882 Citizenship: US  
 Post Office Address: same as above

Full name of additional joint inventor: Roxanne Duan

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 5515 Northfield Road, Bethesda, MD 20817 Citizenship: US  
Post Office Address: same as above

Full name of first joint inventor: Jing-Shan Hu

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 1247 Lakeside Drive #3034, Sunnyvale, CA 94086 Citizenship: CN  
Post Office Address: same as above

Full name of additional joint inventor: Kimberly Florence

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 12805 Atlantic Avenue, Rockville, MD 20851 Citizenship: US  
Post Office Address: same as above

Full name of first joint inventor: Henrik S. Olsen

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 182 Kendrick Place #24, Gaithersburg, MD 20878 Citizenship: DK  
Post Office Address: same as above

Full name of additional joint inventor: Reinhard Ebner

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 9906 Shelburne Terrace #316, Gaithersburg, MD 20878 Citizenship: DE  
Post Office Address: same as above

Full name of first joint inventor: Laue A. Brewer

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 410 Van Dyke St. Apt. 115 St. Paul, Minnesota 55119-4321 Citizenship: US  
Post Office Address: same as above

Full name of additional joint inventor: Paul A. Moore

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 19005 Leatherbark Drive, Germantown, MD 20874 Citizenship: UK  
Post Office Address: same as above

Full name of first joint inventor: Yanggu Shi

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 437 West Side Drive, Gaithersburg, MD 20878 Citizenship: CN  
Post Office Address: same as above

Full name of additional joint inventor: David W. Lafleur

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 3142 Quesada St. NW Washington DC 20015 Citizenship: US  
Post Office Address: same as above

Full name of first joint inventor: Jian Ni

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 5502 Manorfield Road, Rockville, MD 20853 Citizenship: CN  
Post Office Address: same as above

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Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 122 Beckwith Street, Gaithersburg, MD 20878 Citizenship: US  
Post Office Address: same as above

Full name of additional joint inventor: John M. Greene

Inventor's signature: John M. Greene Date: JAN. 21, 1999  
Residence: 872 Diamond Drive, Gaithersburg, MD 20989 Citizenship: US  
Post Office Address: same as above

Full name of first joint inventor: Ann M. Ferrie

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 120 Fox Run Drive Tewksbury, MA 01876 Citizenship: US  
Post Office Address: same as above

Full name of additional joint inventor: Steven M. Ruben

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
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Full name of first joint inventor: Craig A. Rosen

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 22400 Rolling Hill Road, Laytonsville, MD 20882 Citizenship: US  
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Full name of additional joint inventor: Roxanne Duan

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 5515 Northfield Road, Bethesda, MD 20817 Citizenship: US  
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Full name of first joint inventor: Jing-Shan Hu

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
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Residence: 182 Kendrick Place #24, Gaithersburg, MD 20878 Citizenship: DK  
Post Office Address: same as above

Full name of additional joint inventor: Reinhard Ebner

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 9906 Shelburne Terrace #316, Gaithersburg, MD 20878 Citizenship: DE  
Post Office Address: same as above

Full name of first joint inventor: Lauie A. Brewer

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 410 Van Dyke St. Apt. 115 St. Paul, Minnesota 55119-4321 Citizenship: US  
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Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 19005 Leatherbark Drive, Germantown, MD 20874 Citizenship: UK  
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Full name of first joint inventor: Yanggu Shi

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 Residence: 437 West Side Drive, Gaithersburg, MD 20878 Citizenship: CN  
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 Residence: 3142 Quesada St. NW Washington DC 20015 Citizenship: US  
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Full name of first joint inventor: Jian Ni

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
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Residence: 410 Van Dyke St. Apt. 115 St. Paul, Minnesota 55119-4321 Citizenship: US  
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6. 30-May-1997	60/048,350	18. 30-May-1997	60/048,353
7. 30-May-1997	60/048,188	19. 30-May-1997	60/048,160
8. 30-May-1997	60/048,135	20. 30-May-1997	60/048,351
9. 30-May-1997	60/050,937	21. 30-May-1997	60/048,154
10. 30-May-1997	60/048,187	22. 05-Aug-1997	60/054,804
11. 30-May-1997	60/048,099	23. 19-Aug-1997	60/056,370
12. 30-May-1997	60/048,352	24. 02-Oct-1997	60/060,862

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), of any PCT international application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information that is material to patentability as defined in 37 C.F.R. § 1.56 that became available between the filing date of the prior application and the national or PCT international filing date of this application.

PCT/US98/05311  
(Application Serial No.)

March 19, 1998  
(Filing Date)

pending  
(Status: patented, pending, abandoned)

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith A. Anders Brookes (Reg. No. 36,373), James H. Davis (Reg. No. 40,582) and Kenley K. Hoover (Reg. No. 40,302) of Human Genome Sciences, Inc. 9410 Key West Avenue, Rockville, Maryland, 20878.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of first joint inventor: Paul Young

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 122 Beckwith Street, Gaithersburg, MD 20878 Citizenship: US  
Post Office Address: same as above

Full name of additional joint inventor: John M. Greene

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 872 Diamond Drive, Gaithersburg, MD 20989 Citizenship: US  
Post Office Address: same as above

Full name of first joint inventor: Ann M. Ferrie

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 120 Fox Run Drive Tewksbury, MA 01876 Citizenship: US  
Post Office Address: same as above

Full name of additional joint inventor: Steven M. Ruben

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 18528 Heritage Hills Drive, Olney, MD 20832 Citizenship: US  
Post Office Address: same as above

Full name of first joint inventor: Craig A. Rosen

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 22400 Rolling Hill Road, Laytonsville, MD 20882 Citizenship: US  
Post Office Address: same as above



Full name of first joint inventor: Yanggu Shi

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 437 West Side Drive, Gaithersburg, MD 20878 Citizenship: CN  
Post Office Address: same as above

Full name of additional joint inventor: David W. Lafleur

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 3142 Quesada St. NW Washington DC 20015 Citizenship: US  
Post Office Address: same as above

Full name of first joint inventor: Jian Ni

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 5502 Manorfield Road, Rockville, MD 20853 Citizenship: CN  
Post Office Address: same as above

Full name of additional joint inventor: Roxanne Duan  
Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 5515 Northfield Road, Bethesda, MD 20817 Citizenship: US  
Post Office Address: same as above

Full name of first joint inventor: Jing-Shan Hu  
Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 1247 Lakeside Drive #3034, Sunnyvale, CA 94086 Citizenship: CN  
Post Office Address: same as above

Full name of additional joint inventor: Kimberly Florence  
Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 12805 Atlantic Avenue, Rockville, MD 20851 Citizenship: US  
Post Office Address: same as above

Full name of first joint inventor: Henrik S. Olsen  
Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 182 Kendrick Place #24, Gaithersburg, MD 20878 Citizenship: DK  
Post Office Address: same as above

Full name of additional joint inventor: Reinhard Ebner  
Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 9906 Shelburne Terrace #316, Gaithersburg, MD 20878 Citizenship: DE  
Post Office Address: same as above

Full name of first joint inventor: Laure A. Brewer *Laure A. Brewer*  
Inventor's signature: \_\_\_\_\_ Date: Jan-27-97  
Residence: 410 Van Dyke St. Apt. 115 St. Paul, Minnesota 55119-4321 Citizenship: US  
Post Office Address: same as above

Full name of additional joint inventor: Paul A. Moore  
Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 19005 Leatherbark Drive, Germantown, MD 20874 Citizenship: UK  
Post Office Address: same as above

DECLARATION FOR PATENT APPLICATION

As a below named inventor, I declare that I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

87 Human Secreted Proteins

the specification of which was filed on September 17, 1998, Application Serial No. 09/154,707.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT international application, which designated at least one country other than the United States listed below, and have also identified below any foreign application for patent or inventor's certificate, or PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s):

Priority Claimed  
Yes No

(Number) (Country) (Day/Month/Year Filed)

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below.

	Filing Date	Appln No.
1.	21-Mar-1997	60/041,277
2.	21-Mar-1997	60/042,344
3.	21-Mar-1997	60/041,276
4.	21-Mar-1997	60/041,281
5.	30-May-1997	60/048,094
6.	30-May-1997	60/048,350
7.	30-May-1997	60/048,188
8.	30-May-1997	60/048,135
9.	30-May-1997	60/050,937
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13.	30-May-1997	60/048,186
14.	30-May-1997	60/048,069
15.	30-May-1997	60/048,095
16.	30-May-1997	60/048,131
17.	30-May-1997	60/048,096
18.	30-May-1997	60/048,355
19.	30-May-1997	60/048,160
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PCT/US98/05311  
(Application Serial No.)

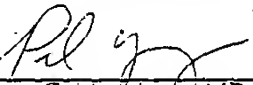
March 19, 1998  
(Filing Date)

pending  
(Status: patented, pending, abandoned)

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith A. Anders Brookes (Reg. No. 36,373), James H. Davis (Reg. No. 40,582) and Kenley K. Hoover (Reg. No. 40,302) of Human Genome Sciences, Inc. 9410 Key West Avenue, Rockville, Maryland, 20878.

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Full name of first joint inventor: Paul Young

Inventor's signature:  Date: 1/20/99  
Residence: 122 Beckwith Street, Gaithersburg, MD 20878 Citizenship: US  
Post Office Address: same as above


Full name of additional joint inventor: John M. Greene

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 872 Diamond Drive, Gaithersburg, MD 20989 Citizenship: US  
Post Office Address: same as above

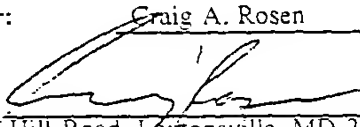
Full name of first joint inventor: Ann M. Ferrie

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 120 Fox Run Drive Tewksbury, MA 01876 Citizenship: US  
Post Office Address: same as above

Full name of additional joint inventor: Steven M. Ruben

Inventor's signature:  Date: 1/20/99  
Residence: 18528 Heritage Hills Drive, Olney, MD 20832 Citizenship: US  
Post Office Address: same as above

Full name of first joint inventor: Craig A. Rosen

Inventor's signature:  Date: 1/23/99  
Residence: 22400 Rolling Hill Road, Laytonville, MD 20882 Citizenship: US  
Post Office Address: same as above

Full name of additional joint inventor: Roxanne Duan

Inventor's signature: *Roxanne Duan* Date: 3/23/99  
Residence: 5515 Northfield Road, Bethesda, MD 20817 Citizenship: US  
Post Office Address: same as above

Full name of first joint inventor: Jing-Shan Hu

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 1247 Lakeside Drive #3034, Sunnyvale, CA 94086 Citizenship: CN  
Post Office Address: same as above

Full name of additional joint inventor: Kimberly Florence

Inventor's signature: *K. Florence* Date: 1/22/99  
Residence: 12805 Atlantic Avenue, Rockville, MD 20851 Citizenship: US  
Post Office Address: same as above

Full name of first joint inventor: Henrik S. Olsen

Inventor's signature: *Henrik Olsen* Date: 1/19/99  
Residence: 182 Kendrick Place #24, Gaithersburg, MD 20878 Citizenship: DK  
Post Office Address: same as above

Full name of additional joint inventor: Reinhard Ebner

Inventor's signature: *R. Ebner* Date: 1/25/99  
Residence: 9906 Shelburne Terrace #316, Gaithersburg, MD 20878 Citizenship: DE  
Post Office Address: same as above

Full name of first joint inventor: Laure A. Brewer

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Residence: 410 Van Dyke St. Apt. 115 St. Paul, Minnesota 55119-4321 Citizenship: US  
Post Office Address: same as above

Full name of additional joint inventor: Paul A. Moore

Inventor's signature: *Paul A. Moore* Date: 1/20/99  
Residence: 19005 Leatherbark Drive, Germantown, MD 20874 Citizenship: UK  
Post Office Address: same as above



## ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, each of the undersigned, Paul Young; John M. Greene; Ann M. Ferrie; Steven M. Ruben; Craig A. Rosen; Roxanne Duan; Jing-Shan Hu; Kimberly Florence; Henrik S. Olsen; Reinhard Ebner; Laurie A. Brewer; Paul A. Moore; Yanggu Shi; David W. Lafleur and Jian Ni

hereby sell(s), assign(s) and transfer(s) to Human Genome Sciences, Inc. ("Assignee") having a place of business at 9410 Key West Avenue, Rockville, MD 20850, its successors, assigns and legal representatives, his entire right, title and interest for the United States and all other countries, in and to the improvements(s) known as:

**87 Human Secreted Proteins**

for which application for United States Letters Patent was filed on September 17, 1998 and assigned Serial No. 09/154,707, and in and to said application and all divisional, continuing, substitute, renewal, reissue and all other applications for Letters Patent which have been or shall be filed in the United States and all other countries on any of said improvements, and in and to all original and reissued patents which have been or shall be issued in the United States and all other countries on said improvements (hereinafter collectively, the "Patent Rights").

The undersigned further agrees that said Assignee may apply for and receive Letters Patent for said improvements in its own name; and, when requested, without charge to but at the expense of Assignee, its successors, assigns and legal representatives, to carry out in good faith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue and all other patent applications on all such improvements; execute all rightful oaths, assignments, powers of attorney and other papers; communicate to said Assignee, its successors, assigns and representatives all facts known to the undersigned relating to said improvements and the history thereof; and do everything possible which said Assignee, its successors, assigns or representatives shall consider desirable for aiding in securing and maintaining proper patent protection for said improvements and for vesting title to said improvements and all applications for patent and all patents on said improvements in Assignee, its successors, assigns and representatives.

The undersigned hereby represents and warrants to Assignee, its successors, assigns and representatives that no assignment, grant, mortgage, license or other right or agreement affecting the rights and property herein conveyed has been made to others by the undersigned and that full right to convey the same as expressed herein is possessed by the undersigned.

The undersigned hereby grants the power to A. Anders Brookes (Reg. No. 36,373), James H. Davis (Reg. No. 40,582) and Kenley Hoover (Reg. No. 40,302) of Human Genome Sciences, Inc., 9410 Key West Avenue, Rockville, Maryland, 20850 to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN WITNESS WHEREOF, this Assignment is executed by the undersigned on the date(s) opposite their signature(s):

Inventor's Signature: \_\_\_\_\_

Paul Young

Date: \_\_\_\_\_

1/20/99

Inventor's Signature: \_\_\_\_\_

John M. Greene

Date: \_\_\_\_\_

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Ann M. Ferrie

Inventor's Signature: Steven M. Ruben Date: 1/20/94  
Steven M. Ruben

Inventor's Signature: Craig A. Rosen Date: 1/23/94  
Craig A. Rosen,

Inventor's Signature: D. Roxanne Duan Date: 3/23/93  
Roxanne Duan

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Jing-Shan Hu

Inventor's Signature: Kimberly Florence Date: 1/22/99  
Kimberly Florence

Inventor's Signature: Henrik S. Olsen Date: 1/20/99  
Henrik S. Olsen

Inventor's Signature: Reinhard Ebner Date: 1/20/99  
Reinhard Ebner

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Lauie A. Brewer

Inventor's Signature: Paul A. Moore Date: 1/20/94  
Paul A. Moore



Inventor's Signature: Yanggu Shi Date: 1/20/99

Inventor's Signature: David W. Lafleur Date: 1/20/99

Inventor's Signature: Jian Ni Date: 1/20/99

11/11/99 11:11:11

## ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, each of the undersigned, Paul Young; John M. Greene; Ann M. Ferrie; Steven M. Ruben; Craig A. Rosen; Roxanne Duan; Jing-Shan Hu; Kimberly Florence; Henrik S. Olsen; Reinhard Ebner; Laurie A. Brewer; Paul A. Moore; Yanggu Shi; David W. Laffleur and Jian Ni

hereby sell(s), assign(s) and transfer(s) to Human Genome Sciences, Inc. ("Assignee") having a place of business at 9410 Key West Avenue, Rockville, MD 20850, its successors, assigns and legal representatives, his entire right, title and interest for the United States and all other countries, in and to the improvements(s) known as:

**87 Human Secreted Proteins**

for which application for United States Letters Patent was filed on September 17, 1998 and assigned Serial No. 09/154,707, and in and to said application and all divisional, continuing, substitute, renewal, reissue and all other applications for Letters Patent which have been or shall be filed in the United States and all other countries on any of said improvements, and in and to all original and reissued patents which have been or shall be issued in the United States and all other countries on said improvements (hereinafter collectively, the "Patent Rights").

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The undersigned hereby represents and warrants to Assignee, its successors, assigns and representatives that no assignment, grant, mortgage, license or other right or agreement affecting the rights and property herein conveyed has been made to others by the undersigned and that full right to convey the same as expressed herein is possessed by the undersigned.

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IN WITNESS WHEREOF, this Assignment is executed by the undersigned on the date(s) opposite their signature(s):

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Paul Young

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
John M. Greene

Inventor's Signature: Ann M. Ferrie Date: \_\_\_\_\_

Inventor's Signature: Steven M. Ruben Date: \_\_\_\_\_

Inventor's Signature: Craig A. Rosen, Date: \_\_\_\_\_

Inventor's Signature: Roxanne Duan Date: \_\_\_\_\_

Inventor's Signature: Jing-Shan Hu Date: \_\_\_\_\_

Inventor's Signature: Kimberly Florence Date: \_\_\_\_\_

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Henrik S. Olsen

Inventor's Signature: Reinhard Ebner Date: \_\_\_\_\_

Inventor's Signature: Laurie A. Brewer Date: 1/27/99

Inventor's Signature: Paul A. Moore Date: \_\_\_\_\_

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Yanggu Shi

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
David W. Lafleur

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Jian Ni

## ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, each of the undersigned, Paul Young; John M. Greene; Ann M. Ferrie; Steven M. Ruben; Craig A. Rosen; Roxanne Duan; Jing-Shan Hu; Kimberly Florence; Henrik S. Olsen; Reinhard Ebner; Laurie A. Brewer; Paul A. Moore; Yanggu Shi; David W. Lafleur and Jian Ni

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### 87 Human Secreted Proteins

for which application for United States Letters Patent was filed on September 17, 1998 and assigned Serial No. 09/154,707, and in and to said application and all divisional, continuing, substitute, renewal, reissue and all other applications for Letters Patent which have been or shall be filed in the United States and all other countries on any of said improvements, and in and to all original and reissued patents which have been or shall be issued in the United States and all other countries on said improvements (hereinafter collectively, the "Patent Rights").

The undersigned further agrees that said Assignee may apply for and receive Letters Patent for said improvements in its own name; and, when requested, without charge to but at the expense of Assignee, its successors, assigns and legal representatives, to carry out in good faith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue and all other patent applications on all such improvements; execute all rightful oaths, assignments, powers of attorney and other papers; communicate to said Assignee, its successors, assigns and representatives all facts known to the undersigned relating to said improvements and the history thereof; and do everything possible which said Assignee, its successors, assigns or representatives shall consider desirable for aiding in securing and maintaining proper patent protection for said improvements and for vesting title to said improvements and all applications for patent and all patents on said improvements in Assignee, its successors, assigns and representatives.

The undersigned hereby represents and warrants to Assignee, its successors, assigns and representatives that no assignment, grant, mortgage, license or other right or agreement affecting the rights and property herein conveyed has been made to others by the undersigned and that full right to convey the same as expressed herein is possessed by the undersigned.

The undersigned hereby grants the power to A. Anders Brookes (Reg. No. 36,373), James H. Davis (Reg. No. 40,582) and Kenley Hoover (Reg. No. 40,302) of Human Genome Sciences, Inc., 9410 Key West Avenue, Rockville, Maryland, 20850 to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN WITNESS WHEREOF, this Assignment is executed by the undersigned on the date(s) opposite their signature(s):

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Paul Young

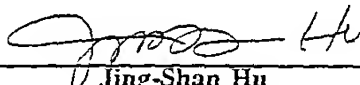
Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
John M. Greene

Inventor's Signature: Ann M. Ferrie Date: \_\_\_\_\_

Inventor's Signature: Steven M. Ruben Date: \_\_\_\_\_

Inventor's Signature: Craig A. Rosen, Date: \_\_\_\_\_

Inventor's Signature: Roxanne Duan Date: \_\_\_\_\_

Inventor's Signature:  Hu Date: 1/25/99  
Jing-Shan Hu

Inventor's Signature: Kimberly Florence Date: \_\_\_\_\_

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Henrik S. Olsen

Inventor's Signature: Reinhard Ebner Date: \_\_\_\_\_

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Laurie A. Brewer

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Paul A. Moore

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Yanggu Shi

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
David W. Lafleur

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Jian Ni

2009-09-15 10:00:00

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, each of the undersigned, Paul Young; John M. Greene; Ann M. Ferrie; Steven M. Ruben; Craig A. Rosen; Roxanne Duan; Jing-Shan Hu; Kimberly Florence; Henrik S. Olsen; Reinhard Ebner; Laurie A. Brewer; Paul A. Moore; Yanggu Shi; David W. Lafleur and Jian Ni

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**87 Human Secreted Proteins**

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Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Paul Young

Inventor's Signature: John M. Greene Date: JAN 21, 1999  
John M. Greene



Inventor's Signature: Ann M. Ferrie Date: \_\_\_\_\_

Inventor's Signature: Steven M. Ruben Date: \_\_\_\_\_

Inventor's Signature: Craig A. Rosen, Date: \_\_\_\_\_

Inventor's Signature: Roxanne Duan Date: \_\_\_\_\_

Inventor's Signature: Jing-Shan Hu Date: \_\_\_\_\_

Inventor's Signature: Kimberly Florence Date: \_\_\_\_\_

Inventor's Signature: Henrik S. Olsen Date: \_\_\_\_\_

Inventor's Signature: Reinhard Ebner Date: \_\_\_\_\_

Inventor's Signature: Laure A. Brewer Date: \_\_\_\_\_

Inventor's Signature: Paul A. Moore Date: \_\_\_\_\_

Inventor's Signature: Yanggu Shi Date: \_\_\_\_\_

Inventor's Signature: David W. Lafleur Date: \_\_\_\_\_

Inventor's Signature: Jian Ni Date: \_\_\_\_\_

11/11/09 10:00 AM

## ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, each of the undersigned, Paul Young; John M. Greene; Ann M. Ferrie; Steven M. Ruben; Craig A. Rosen; Roxanne Duan; Jing-Shan Hu; Kimberly Florence; Henrik S. Olsen; Reinhard Ebner; Laurie A. Brewer; Paul A. Moore; Yanggu Shi; David W. Lafleur and Jian Ni

hereby sell(s), assign(s) and transfer(s) to Human Genome Sciences, Inc. ("Assignee") having a place of business at 9410 Key West Avenue, Rockville, MD 20850, its successors; assigns and legal representatives, his entire right, title and interest for the United States and all other countries, in and to the improvements(s) known as:

**87 Human Secreted Proteins**

for which application for United States Letters Patent was filed on September 17, 1998 and assigned Serial No. 09/154,707, and in and to said application and all divisional, continuing, substitute, renewal, reissue and all other applications for Letters Patent which have been or shall be filed in the United States and all other countries on any of said improvements, and in and to all original and reissued patents which have been or shall be issued in the United States and all other countries on said improvements (hereinafter collectively, the "Patent Rights").

The undersigned further agrees that said Assignee may apply for and receive Letters Patent for said improvements in its own name; and, when requested, without charge to but at the expense of Assignee, its successors, assigns and legal representatives, to carry out in good faith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue and all other patent applications on all such improvements; execute all rightful oaths, assignments, powers of attorney and other papers; communicate to said Assignee, its successors, assigns and representatives all facts known to the undersigned relating to said improvements and the history thereof; and do everything possible which said Assignee, its successors, assigns or representatives shall consider desirable for aiding in securing and maintaining proper patent protection for said improvements and for vesting title to said improvements and all applications for patent and all patents on said improvements in Assignee, its successors, assigns and representatives.

The undersigned hereby represents and warrants to Assignee, its successors, assigns and representatives that no assignment, grant, mortgage, license or other right or agreement affecting the rights and property herein conveyed has been made to others by the undersigned and that full right to convey the same as expressed herein is possessed by the undersigned.

The undersigned hereby grants the power to A. Anders Brookes (Reg. No. 36,373), James H. Davis (Reg. No. 40,582) and Kenley Hoover (Reg. No. 40,302) of Human Genome Sciences, Inc., 9410 Key West Avenue, Rockville, Maryland, 20850 to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN WITNESS WHEREOF, this Assignment is executed by the undersigned on the date(s) opposite their signature(s):

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Paul Young

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
John M. Greene

Inventor's Signature:  Date: 1/25/99  
Ann M. Ferrie

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Steven M. Ruben

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Craig A. Rosen,

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Roxanne Duan

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Jing-Shan Hu

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Kimberly Florence

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Henrik S. Olsen

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Reinhard Ebner

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Laure A. Brewer

Inventor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Paul A. Moore

